

WHAT IS CLAIMED IS:

1. A spiral separation membrane element comprising a perforated core tube and, wound therearound, one or more separation membranes, one or more feed-side passage materials, and one or more permeation-side passage materials, wherein the permeation-side passage materials each have warps extending almost parallel with the direction of flow of a permeated liquid and wefts fixed to the warps, a ratio of the pitch (width of each warp + distance between the opposed sides of adjacent warps) to a distance between the opposed sides of adjacent warps is 1.1/1 to 3/1, and a ratio of a thickness of the passage material to a distance between the opposed sides of adjacent warps is 0.25/1 to 1.25/1.

2. The spiral separation membrane element as claimed in claim 1, wherein the ratio of the height of each warp to the thickness of the passage material is 10/11 to 30/31.

3. The spiral separation membrane element as claimed in claim 1, wherein the ratio of the pitch (width of each warp + distance between the opposed sides of adjacent warps) to a distance between the opposed sides of adjacent warps is 1.5/1 to 2.5/1.

4. The spiral separation membrane element as claimed in claim 1, wherein the ratio of a thickness of the passage material to a distance between the opposed sides of adjacent warps is 0.3/1 to 1.0/1.

5. The spiral separation membrane element as claimed in claim 1, wherein the

warp has a diameter of 350-600 μm , and the weft has a diameter of 20-50 μm .

6. The spiral separation membrane element as claimed in claim 1, wherein a distance between the opposed sides of adjacent warps is 0.3-1.5 mm.

7. The spiral separation membrane element as claimed in claim 1, wherein a distance between the opposed sides of adjacent wefts is 200-1,000 μm .